

I am opposed to any relaxation of rules regarding BPL or PLC systems. In fact, I do not consider that Part 15 of the Commission's rules to be sufficient for the protection of the services within the adjacent radio frequency spectrum. I am highly dubious of the ability of the electrical power distribution companies to understand and maintain the non-interference aspects of their systems-particularly when such maintenance performed on a voluntary basis eats into their profitability.

The recent NTIA report suggests that interference will be observed at considerable distances (for a residential neighborhood) from the BPL subscriber. This interference will extend throughout the radio frequency spectrum where it is not specifically "notched" or filtered out. My experience as a communications engineer has taught me that even with such means as these, the undesired signals have a chance to "fill-in" given very small non-linearities in a given system. [For example: noise loading tests used in digital wireless and wireline communications measurements]

I have written the above as an active radio amateur operator with equipment that operates throughout the radio spectrum including the affected regions. My own experience with tracking and solving interference indicates that electrical distribution companies will have varying abilities and attitudes towards solving interference problems caused to the spectrum users. I don't believe any study addresses the issue of susceptibility of the BPL systems to strong signals that get coupled into the system. While the residential user may be inconvenienced and therefore have to put up larger antenna or run more power to maintain contact, the mobile user or portable station stands to suffer the most interference. These are, of course, the stations most in need of a low noise floor given the low aperture areas of the antennas that can be erected for the frequencies of interest. Coincidentally, they are also most likely to be the first stations activated in a time of emergency.

It is for all of these reasons that I believe BPL/PLC systems implementation should not be governed by Part 15 limits but a new stricter set of limits specifically for this service that addresses the peak field strength limitations raised by the NTIA IF it is deployed at all.